

IN THE CLAIMS:

The claims are amended as follows:

1. (Twice amended) An ink-jet recording apparatus comprising:
- a recording head for receiving ink supplied via a first ink supply path and for ejecting ink droplets;
- a second ink supply path along which ink is transmitted from an ink supply to said first ink supply path,
- wherein said ink is transmitted in said second ink supply path generally in an ink transfer direction from said ink supply to said first ink supply path,
- wherein said second ink supply path comprises a connection portion that receives said ink from said ink supply and comprises an enlarged portion, and
- wherein a cross-sectional area of said enlarged portion, which is substantially perpendicular to said ink transfer direction, is greater than a cross-sectional area of said connection portion, which is substantially perpendicular to said ink transfer direction; and
- a filter which is located at a joint area that forms a communication portion situated between said first ink supply path and said second ink supply path, wherein said enlarged portion comprises at least a portion of said joint area,
- wherein ink induction paths are formed in said enlarged portion in order to use capillary attraction to induce the flow of ink through said filter, and
- wherein said enlarged portion is tapered such that said cross-sectional area of said enlarged portion gradually changes along said ink transfer direction from said second ink supply path to said first ink supply path.
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Q³ 5. (Twice amended) An ink-jet recording apparatus according to claim 1, wherein said ink induction paths are formed at positions that are farthest from said first ink supply path in said cross-sectional area of said enlarged portion.

10. (Twice amended) An ink-jet recording apparatus comprising:
a recording head for receiving ink supplied via a first ink supply path and for ejecting ink droplets;

a second ink supply path along which ink is transmitted from an ink supply to said first ink supply path,

wherein said ink is transmitted in said second ink supply path generally in an ink transfer direction from said ink supply to said first ink supply path,

Q⁴ wherein said second ink supply path comprises a connection portion that receives said ink from said ink supply and comprises an enlarged portion, and

wherein a cross-sectional area of said enlarged portion, which is substantially perpendicular to said ink transfer direction, is greater than a cross-sectional area of said connection portion, which is substantially perpendicular to said ink transfer direction; and
a filter which is located at a joint area that forms a communication portion situated between said first ink supply path and said second ink supply path, wherein said enlarged portion comprises at least a portion of said joint area,

wherein ink induction paths are formed in said enlarged portion in order to use capillary attraction to induce the flow of ink through said filter,

Q⁴ cont.
wherein said ink induction paths are extended to an area that does not face said first ink supply path, and

wherein said ink induction paths are formed by mounting a rib formation member in said enlarged portion.

12. (Twice amended) An ink-jet recording apparatus comprising:
a recording head for receiving ink supplied via a first ink supply path and for ejecting ink droplets;

a second ink supply path along which ink is transmitted from an ink supply to said first ink supply path,

wherein said ink is transmitted in said second ink supply path generally in an ink transfer direction from said ink supply to said first ink supply path,

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wherein said second ink supply path comprises a connection portion that receives said ink from said ink supply and comprises an enlarged portion, and

wherein a cross-sectional area of said enlarged portion, which is substantially perpendicular to said ink transfer direction, is greater than a cross-sectional area of said connection portion, which is substantially perpendicular to said ink transfer direction; and
a filter which is located at a joint area that forms a communication portion situated between said first ink supply path and said second ink supply path, wherein said enlarged portion comprises at least a portion of said joint area,

wherein ink induction paths are formed in said enlarged portion in order to use capillary attraction to induce the flow of ink through said filter,

wherein said ink induction paths are extended to an area that does not face said first ink supply path, and

wherein said ink induction paths are formed in a holder that is mounted in said enlarged portion, said holder including a rod-shaped member that is positioned coaxially with said second ink supply path.

15. (Once amended) An ink-jet recording apparatus comprising:

a recording head for receiving ink supplied via a first ink supply path and for ejecting ink droplets;

a second ink supply path along which ink is transmitted from an ink cartridge to said first ink supply path; and

a filter which is located at a joint area that forms a communication portion situated between said first ink supply path and said second ink supply path,

wherein ink induction paths are formed at said joint area adjacent to said second ink supply path in order to use capillary attraction to induce the flow of ink through said filter, and said ink induction paths are extended from an ink inlet of said second ink supply path, and

wherein said joint area is tapered such that a cross-sectional area of said joint area gradually changes along a direction from said second ink supply path to said first ink supply path.

Please add the following new claims.

--16. (New) An ink-jet recording apparatus according to claim 9, wherein said groove

formation member comprises rigid grooves.

17. (New) An ink-jet recording apparatus according to claim 11, wherein said ink induction paths do not contact an inner wall of said enlarged portion.

18. (New) An ink-jet recording apparatus according to claim 11, wherein said ink induction paths are disposed substantially in a center of said cross-section of said enlarged portion.

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19. (New) An ink jet recording apparatus according to claim 1, wherein said cross-sectional area of said enlarged portion gradually increases along said ink transfer direction from said second ink supply path to said first ink supply path.

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20. (New) An ink supply passage structure comprising:
a first ink supply path having a first open end, wherein said first ink supply path axially terminates at the first open end;
a second ink supply path connected to and extending from the first open end to be communicated with the first ink supply path, wherein the second ink supply path is at least as large in cross sectional area as the first ink supply path, and the first open end of the first ink supply path forms an axial terminus of the second ink supply path; and
a protrusion and/or groove axially provided to the second ink supply path, wherein the protrusion and/or groove is contiguous to at least the first open end of the first ink supply path.

21. (New) An ink supply passage structure according to claim 20, wherein the protrusion and/or groove axially terminates at the first open end of the first ink supply path.

22. (New) An ink supply passage according to claim 20, wherein the protrusion and/or groove axially extends between the first and second ink supply paths across the first open end of the first ink supply path.

23. (New) An ink supply passage structure according to claim 20, wherein the second ink supply path is in the form of a conical chamber.

24. (New) An ink supply passage structure according to claim 20, further comprising: a filter located at an opposite axial terminus of the second ink supply path.

25. (New) An ink supply passage structure according to claim 20, wherein a plurality of protrusions are arranged along an inner circumference of the second ink supply path so that an ink induction path is formed between each adjacent pair of the protrusions.

26. (New) An ink supply passage structure according to claim 20, wherein a plurality of grooves are arranged along an inner circumference of the second ink supply path so that each of the grooves forms an ink induction path -

Amendment Under 37 C.F.R. § 1.111
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27. (New) An ink supply passage structure according to claim 20; wherein
the protrusion is formed of material having ink affinity.--
